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### An fMRI study of subliminal priming of spoken words

Christophe Pallier<sup>a</sup>, Sid Kouider<sup>b</sup> and Vincent De Gardelle<sup>b</sup>

<sup>a</sup>Cognitive Neuroimaging Unit INSERM 562, CEA/Neurospin, bat 145, point courrier 156, 91191 Gif/Yvette, France

<sup>b</sup>Laboratoire de Sciences Cognitives et Psycholinguistique, Ecole Normale Supérieure, 29 rue d'Ulm, 75005 Paris, France

Repetition priming has been widely used to study spoken and written word recognition. Its physiological counterpart is repetition suppression, a reduction in neural activity resulting in a measurable decrease of the fMRI signal. By varying the representational level at which the repetition occurs, one can determine which properties are encoded in a given brain area, and which are not. We will report on an fMRI experiment using subliminal auditory priming of spoken words. Subliminal priming has been used, for example, by Dehaene et al. to study visual word recognition. Our experiment employs a technique developed by Kouider & Dupoux that allows subliminal presentation of auditory stimuli using temporal compression and forward masking. The participants perform a lexical decision task on the target item, which is preceded by a subliminal prime that can be phonetically identical or different from the target, and spoken or not by the same speaker. A fast-event related paradigm is used where each prime-target pair is presented during silent gaps between the acquisitions. The planned analyses will seek to identify the brain regions showing subliminal repetition suppression to word repetition regardless of speaker change, as well as other areas sensitive to speaker change regardless of linguistic content.